



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/503,552	02/14/2000	Garry P. Epps	M-7413 US	6784

33031 7590 08/24/2004

CAMPBELL STEPHENSON ASCOLESE, LLP
4807 SPICEWOOD SPRINGS RD.
BLDG. 4, SUITE 201
AUSTIN, TX 78759

EXAMINER

HARPER, KEVIN C

ART UNIT	PAPER NUMBER
----------	--------------

2666

DATE MAILED: 08/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/503,552

Applicant(s)

EPPS ET AL.

Examiner

Kevin C. Harper

Art Unit

2666

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16, 23-34 and 41-49 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16, 23-34 and 41-49 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 February 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Response to Arguments

Applicant's arguments, filed June 3, 2004, with respect to the rejection(s) of claim(s) 17-22, 35-40 and 50 have been fully considered and are persuasive.

Drawings

1. Applicant argued that the drawings are proper. However, labeling a rectangular box with only a reference number makes it difficult to determine the relevance of the rectangular box. Without a descriptive label, each person viewing the figure would need to find the corresponding reference number in the specification to determine that item 220 in Figure 4 is a pipelined switch, for example. This is especially burdensome when only a cursory review of a figure is needed to determine the general nature or relevance of the invention if patented.
2. The drawings are objected to because the following requires descriptive wording (37 CFR 1.83(a)): Figure 4, item 220; Figure 12, item 240; Figure 13, item 1220; Figure 14, item 1210; Figure 15, item 280; and, Figure 32, item 1510. Corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground

provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

3. Claims 1-2, 5-6, 23-29 and 41-49 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 6 and 10 of copending Application No. 10/219,460. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 1, 5-6, 23, 25-29 and 41-49 are a subset of the limitations of claims 1, 6 and 10 of the '460 application.

4. Claim 11 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 12 of copending Application No. 10/219,460. Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 11 is a subset of the limitations of claims 1 and 12 of the '460 application.

5. Claims 9, 14 and 32 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 7 and 13 of copending Application No. 10/219,460. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 9, 14 and 32 are a subset of the limitations of claims 1, 7 and 13 of the '460 application.

Claims 3-4, 7-8, 12-13, 16, 30-31 and 34 provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 6 of copending Application No. 10/219,460 in view of Li et al. (US 5,757,771).

6. Regarding claims 3-4, 7-8, 12-13, 16, 30-31 and 34, claims 1 and 6 of the '460 application recite a pipelined switch but do not recite an input buffer comprising same or different sized buffers or an output buffer. Li discloses an input buffer having variable sized buffers that may have the same size or different sizes depending on fullness (abstract, last six lines; fig. 5B), and an output FIFO (item 507). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to recite an input buffer having equal or different sized buffers and an output buffer in the '460 application in order to properly accommodate levels of input data and to prevent the loss of data at an output, respectively.

Claims 10, 15 and 33 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 6 of copending Application No. 10/219,460 in view of Hluchyj et al. (US 5,426,640).

7. Regarding claims 10, 15 and 33, claims 1 and 6 of the '460 application recite congestion avoidance, but do not recite determining congestion status based on average depth. Hluchyj discloses determining congestion based on the average depth of a queue (col. 4, lines 38-42). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to recite congestion status based on average buffer depth in the '460 application in order to reduce the time sensitivity of congestion indication.

Allowable Subject Matter

8. Claims 1-16, 23-34 and 41-49 would be allowable if the above double patenting rejections are overcome.

Conclusion

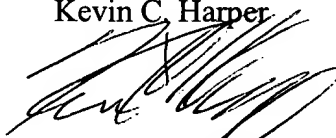
9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Laor et al. (US 6,147,996) disclose pipeline processing of a packet header (fig. 2A). Merchant et al. (US 6,658,015) discloses simultaneous processing for a packet header (fig. 4).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Harper whose telephone number is 703-305-0139 (as of August 25, 2004, the number will be 571-272-3166). The examiner can normally be reached weekdays from 11:30 AM to 8:00 PM ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema S. Rao, can be reached at 703-308-5463 (as of August 25, 2004, the number will be 571-272-3174). The centralized fax number for the Patent Office is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only (applications must be associated with a customer number). For more information about the PAIR system, see pair.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kevin C. Harper



August 23, 2002